



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE F		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/712,896	11/13/2003	Steven D. Linscombe	03A1 Linscombe	9466		
25547	7590 07/15/2005		EXAM	EXAMINER		
	DEPARTMENT PORTER, BROOKS & PH	ROBINSON, K	ROBINSON, KEITH O NEAL			
P.O. BOX 2	•	ART UNIT	PAPER NUMBER			
BATON RO	OUGE, LA 70821-2471	1638				
			DATE MAILED: 07/15/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	on No.	Applicant(s)				
	Office Astice Comme	10/712,8	96	LINSCOMBE, STEVEN D.				
Office Action Summary		Examine	7	Art Unit				
			Robinson, Ph.D.	1638				
Period fo	The MAILING DATE of this communicat or Reply	tion appears on th	e cover sheet with the c	correspondence ad	ldress			
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA nasions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communic period for reply specified above is less than thirty (30) date of period for reply is specified above, the maximum statutor re to reply within the set or extended period for reply will, reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no exation. 1ys, a reply within the stary period will apply and voluments the apply statute, cause the apply statute, cause the apply statute.	ent, however, may a reply be tim tutory minimum of thirty (30) day rill expire SIX (6) MONTHS from dication to become ABANDONE	nely filed s will be considered timel the mailing date of this c D (35 U.S.C. § 133).				
Status								
1)[Responsive to communication(s) filed o	n <u>18 April 2005</u> .						
2a)⊠ This action is FINAL. 2b)□ This action is non-final.								
3)□	·							
Disposit	ion of Claims							
5)[
Applicat	on Papers		•					
9)	The specification is objected to by the Ex	xaminer.						
10)	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any objection	n to the drawing(s)	oe held in abeyance. See	e 37 CFR 1.85(a).				
11)	Replacement drawing sheet(s) including the The oath or declaration is objected to by	•	• • • •		` '			
Priority (ınder 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim for a All b) Some * c) None of: 1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of the application from the International See the attached detailed Office action for	cuments have bee cuments have bee he priority docum Bureau (PCT Ru	en received. en received in Applicati ents have been receive le 17.2(a)).	on No ed in this National	Stage			
Attachmen	• •							
1)	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-	948)	4) Interview Summary Paper No(s)/Mail Da					
3) 🔲 Infori	nation Disclosure Statement(s) (PTO-1449 or PTC r No(s)/Mail Date		5) Notice of Informal P 6) Other:		O-152)			

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

The amendments to claims 5, 6, 9, and 15-22, the cancellation of claims 10-14, and the addition of new claims 23-33, filed April 18, 2005, have been received and entered in full.

Claims 1-9 and 15-33 are pending.

Response to Arguments

- 2. The U.S.C. 112, first paragraph rejections for claim 5 are withdrawn in view of Applicant's amendments (see page 2 of Remarks of 18 April 2005, first sentence).
- 3. The U.S.C. 112, first paragraph rejections for claims 1-22, in view of the lack of deposit, are withdrawn in view of Applicant's statements regarding the deposit under the Budapest Treaty (see page 3 of Remarks, second to fourth paragraphs).
- 4. The U.S.C. 112, second paragraph rejection for claim 12 is moot due to the cancellation of this claim as stated above.
- 5. The U.S.C. 102(b) rejections for claims 5 and 12-14 are withdrawn for claim 5 in view of Applicant's amendments (see page 2 of Remarks, first sentence) and are moot for claims 12-14 due to the cancellation of these claims as stated above.

Art Unit: 1638

Claim Rejections - 35 USC § 112, first paragraph

Written Description

6. Claims 15-22, 25-26 and 29-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, as stated on pages 4-7 of the last Office Action for claims 5 and 10-22. Applicant argues that claim 15, the independent claim, and all dependent claims (claims 16-22) meet the written description requirement (see pages 4-5 of Applicant's Remarks of 18 April 2005).

This is not persuasive. As Applicant's discussion focuses on claim 15, the Examiner's response will focus on claim 15. Claim 15 is drawn to a method of producing a rice plant wherein said method comprises deriving a rice plant from the rice plant of claim 5 by a single gene conversion. The specification fails to provide a written description of the single gene conversion claimed in claim 15. For example, there is no written description of the number of backcrossing, crossing, or selfing generations used to derive a rice plant by single gene conversion nor is there a written description of the broad genus of rice plants that could be used in a cross to obtain a single gene conversion. Furthermore, the second parent used in the method is uncharacterized and any progeny derived from such a single gene conversion would also be uncharacterized. For example, if the single gene conversion produced rice plants that

Art Unit: 1638

were derived from an F2 population, there would be rice plants that would have a genetic makeup that consists of 100% of the uncharacterized genes of the uncharacterized parent. In addition, claims 15-18 and 29-31 do not specify encoded traits or the sequences conferring them of the single gene conversion and thus are not adequately described. Therefore, the Examiner maintains the rejection of the previous Office Action mailed December 16, 2004 due to lack of written description.

Enablement

7. Claims 15-22, 25-26 and 29-33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, as stated on pages 7-11 of the previous Office Action for claims 5 and 10-22.

Applicant argues that claim 15, the independent claim, and all dependent claims (claims 16-22) meet the enablement requirement (see pages 5-7 of Applicant's Response of 18 April 2005).

This is not persuasive. As Applicant's discussion focuses on claim 15, the Examiner's response will focus on claim 15. Claim 15 is drawn to a method of producing a rice plant wherein said method comprises deriving a rice plant from the rice plant of claim 5 by a single gene conversion.

Claim 15 does not meet the requirements for enablement because the specification does not teach one skilled in the art how to make and use the claimed

Art Unit: 1638

invention. The specification fails to provide guidance regarding the single gene conversion claimed in claim 15. There is no guidance regarding the number of backcrossing, crossing, or selfing generations used to derive a rice plant by single gene conversion nor is there any guidance regarding the broad genus of rice plants that could be used in a cross to obtain a single gene conversion. Based on the broadly claimed invention of claim 15, for example, one could interpret a single gene conversion to mean an F2 population derived from a cross between the plant of claim 5 and another rice plant. In this example, a single gene conversion has occurred, but the specification does not teach how to distinguish the rice plant with the single gene conversion from all the other rice plants in the segregating population. Furthermore, the specification does not provide any guidance for the uncharacterized parent used in the cross to derive a rice plant from the rice plant of claim 5 by a single gene conversion. For example, if the single gene conversion produced rice plants that were derived from an F2 population, there would be rice plants that would have a genetic makeup that consists of 100% of the uncharacterized genes of the uncharacterized parent, thus one skilled in the art would not know how to use said rice plants. Even after a single backcross, rice plants would contain as much as 25% of the genes of the uncharacterized parent. In addition, claims 15-18 and 29-31 do not specify encoded traits or the sequences conferring them of the single gene conversion, thus one skilled in the art would not know how to use plants with such uncharacterized traits and sequences. Thus, the invention of claim 15 (and its dependents, claims 16-22) and claims 25-26 and 29-33, is not enabled and one of skill in the art would not know how to make and use the invention.

Application/Control Number: 10/712,896 Page 6

Art Unit: 1638

8. Applicant does not argue the Examiner's statements regarding the unpredictability of the introgression of single genes into plants. Thus, the rejections of the previous Office Action regarding the unpredictability of such an introgression are maintained (see pages 10-11 of the previous Office Action).

Conclusion

- 9. Claims 1-9 and 15-33 are free of the prior art given the failure of the prior art to teach or suggest a rice seed with the genetic, morphological, and physiological complement of rice seed 'Cheniere', or methods of its use in breeding programs.
- 10. Claims 15-22, 25-26 and 29-33 are rejected.
- 11. Claims 1-9, 23-24 and 27-28 are allowed.
- 12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/712,896

Art Unit: 1638

Page 7

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith O. Robinson, Ph.D. whose telephone number is 571-272-2918. The examiner can normally be reached on Monday - Friday 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on 571-272-0745. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith O. Robinson, Ph.D.

June 28, 2005

DAVID T. FOX
PRIMARY EXAMINER

GROUP 1880 (638